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## Annual Bulletin on Soviet Economic Growth

January-December 1988

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# Annual Bulletin on Soviet Economic Growth

January-December 1988

This bulletin was prepared by  
Office of Soviet Analysis, with contributions  
from the  
Divisions, SOVA.

Comments and queries are welcome and may be  
directed to the Chief, Division,

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May 1989

**Annual Bulletin on  
Soviet Economic Growth**

**Scope Note**

This publication is the latest in a series of bulletins on the performance of the Soviet economy published on a quarterly basis since 1984 by the Office of Soviet Analysis. The fourth-quarter (annual) bulletin presents for the record our assessment of the performance of the economy for the entire year. A wrap-up of economic developments in the USSR is also done each year in a joint paper by the Central Intelligence Agency and Defense Intelligence Agency for the Joint Economic Committee of Congress. The joint CIA-DIA paper analyzes Soviet economic performance but concentrates on broader policy issues, particularly defense spending and its impact on the economy. See, for example, joint CIA-DIA paper DDB -1900-155-89, *The Soviet Economy in 1988: Gorbachev Changes Course*, May 1989.

This bulletin uses both independently derived CIA measures and official Soviet statistics to analyze the performance of the Soviet economy and assess the progress of the leadership's economic plans and policies. Independently derived CIA measures—for example, of the growth of GNP, industrial production, and agricultural output—are used when we believe that the corresponding Soviet indicators distort actual economic performance, generally because their growth reflects inflation or varying degrees of double counting, and when we have sufficient data to construct alternative measures. When we lack such data or judge the Soviet indicators to be reliable, official statistics are used and are identified as such in the text and accompanying tables and charts.

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## Annual Bulletin on Soviet Economic Growth

### Key Judgments

According to preliminary CIA estimates, the Soviet economy grew by about 1.5 percent in 1988—the second straight year of poor performance. A mediocre harvest did much to slow the economy's growth, but the increase in industrial output was also less than in the previous year. Indeed, the overall performance of the economy last year was no better than the lackluster results achieved in the early 1980s—years that the current leadership has characterized as "a period of stagnation."

Most of the programs that the leadership was counting on to boost economic performance last year produced disappointing results:

- The industrial modernization program, a major part of Gorbachev's program to revitalize the economy, sputtered as commissionings of new factory capacity and production of modern machinery and equipment fell far short of the economy's needs.
- The expansion of reform measures, such as enterprise self-financing, disrupted the economy as problems in their design and execution largely undermined their effectiveness.

Perhaps most important, the regime's effort to improve consumer welfare and increase popular support for Gorbachev's programs was largely unsuccessful. Consumers saw little improvement in their living standards during 1988. Indeed, daily life in many respects became harder: food shortages worsened; inflationary pressures intensified, primarily as a result of a rapidly growing budget deficit; and a variety of goods—particularly cheaply priced clothing—disappeared from retail stores. These problems contributed to an apparently growing perception in the USSR that under *perestroyka* ordinary people are the victims rather than the beneficiaries of change.

In an effort to turn the situation around, the Soviet leadership has revised its economic priorities. Its primary focus for 1989 is on reducing inflationary pressures and improving living standards. Neither the modernization program nor economic reform has been abandoned, but both are temporarily taking back seats to the effort to strengthen popular support for *perestroyka* in the economic sphere. These shifts have been reflected in:

- The approval of an economic plan for 1989 that emphasizes the delivery of more and better consumer goods and services.
- A subsequent decision to cut state centralized investment and a promise to reduce defense expenditures in 1989-90 by about 14 percent.
- Leadership statements that retail price reform has been put on hold indefinitely

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In our view, the specific measures approved so far have the potential to help reduce the budget deficit, provide more resources for consumption, and restore consumer confidence. Still, the experience of the past three years suggests that problems and delays in implementing the revisions in the economic game plan are almost certain to occur. Moreover, while delaying price reform should ease consumer anxieties, it also will deny producers the incentive they need to improve the quality of goods and services and increase productivity. On balance, therefore, Soviet economic prospects for 1989 are probably modest at best. Although slight improvements in living standards are possible, economic growth is likely to remain slow, and the regime probably will continue to be frustrated by the economy's slow progress in improving product quality and increasing efficiency.

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### High Leadership Expectations in 1988

After a disappointing year in 1987, Soviet leaders were counting on a wider introduction of *perestroika* last year to spur economic growth, improve living standards, and dispel the population's misgivings about Gorbachev's domestic policies. To judge from leadership speeches, the Kremlin believed that some fine-tuning of the modernization program, further decentralization of economic decision making, more opportunities for workers to earn larger incomes, and the expanded dimensions of private entrepreneurial activity would promote more personal initiative and lead to greater output and efficiency throughout the economy.

The economy's performance in 1988, however, fell well short of the leadership's expectations. Not only was economic growth no better than in 1987, but the reforms introduced last year contributed to a new set of problems—including a higher rate of inflation and shortages in consumer markets. By the end of the year, Gorbachev's restructuring program had seemingly lost momentum, and the leadership altered its approach to solving the country's economic problems.

### 1988 Results

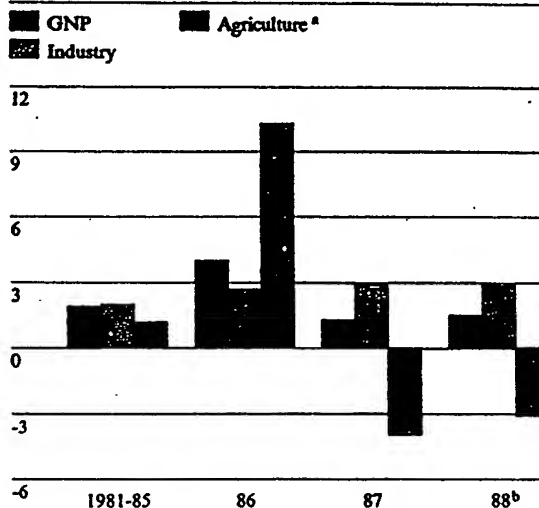
According to preliminary CIA estimates, the Soviet economy grew by about 1.5 percent last year—the second straight year of poor performance. A disappointing harvest did much to slow the economy's growth, but industrial growth was also less than in the previous year. Overall, the performance of the economy was no better than the lackluster results achieved in the early 1980s (see figure 1)

#### Industry

Industrial production increased by about 2½ percent in 1988, roughly the same as the sluggish growth rates registered throughout most of this decade. Of

Figure 1  
USSR: Economic Growth, 1981-88

Average annual rate of growth



<sup>a</sup> Net of feed, seed, waste, and purchases from other sectors.

<sup>b</sup> Preliminary.

the 10 branches of industry, only four—ferrous and nonferrous metals, wood products, and light industry—showed any appreciable improvement. Estimated growth in the remaining branches declined—by substantial amounts in several key industries (see table 1).



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**Table 1**  
**USSR: Growth of GNP and**  
**Selected Sectors of the Economy,**  
**1981-88 \***

Percent

	Average Annual 1981-85	1986	1987	1988 <sup>b</sup>
GNP	1.9	4.0	1.3	1.5
Industry	2.0	2.7	2.9	2.3
Ferrous metals	0.8	3.3	1.5	1.7
Nonferrous metals	2.0	3.0	1.9	3.0
Fuel	0.9	3.5	1.9	1.4
Electric power	3.1	3.6	4.1	2.4
Machinery	2.0	3.0	3.7	2.5
Chemicals	3.8	4.8	2.6	1.8
Wood products	2.1	4.6	2.0	2.5
Construction materials	1.4	3.9	3.2	3.0
Light industry	1.6	1.4	1.7	2.5
Food industry	1.8	-4.9	3.6	2.9
Construction	2.1	3.8	2.3	2.2
Agriculture <sup>c</sup>	1.2	10.3	-4.0	-3.1
Transportation	2.2	3.0	1.2	2.1
Communications	3.9	5.5	6.8	7.0
Trade	1.8	0.3	2.1	1.9
Services	2.2	2.3	3.2	3.5

\* Measured in 1982 factor cost prices.

<sup>b</sup> Preliminary estimates.

<sup>c</sup> Net of feed, seed, waste, and purchases from other sectors.

#### Several factors combined to limit industry's growth:

- Most ministries resisted new reform measures and continued to force firms to produce according to ministerial *diktat* rather than allowing them to find and exploit opportunities for growth.
- Many enterprises increased their profits by eliminating or reducing output of goods with low state-set prices, thereby creating shortages and supply disruptions that constrained production. Complaints were voiced at a Council of Ministers meeting last October, for instance, that standard products such as conveyor belts had become virtually unavailable as enterprises adjusted their output mix in the interest of greater profitability.

- Shortfalls in bringing new capacity on line also hampered production as commissionings increased by less than 1 percent in 1988, about one-twelfth of the planned rate.

Moscow's quality control campaign (*gospriyemka*) also continued to impede industrial production, even though, according to Soviet officials, it failed to generate much improvement in quality during the program's second year. Premier Ryzhkov stated in July, for instance, that "we have issued a mass of seals of quality, but we still have no quality." In the wake of such complaints, the future of the quality control campaign is unclear. The Soviets have scaled back their plans to expand the program this year, and debate over *gospriyemka* is continuing.

**Industrial Materials.** Gorbachev's plans to modernize the USSR's industrial plant and improve the quality of output require greater output of advanced metals, chemicals, and construction supplies. Most materials-producing branches performed poorly last year, however, as they had in 1987

Serious shortages of plastics and resins, intermediate chemicals (synthetic ammonia, soda ash, and caustic soda), and pesticides held estimated growth in the *chemical* industry to under 2 percent. Lags in bringing new capacity on line and confusion caused by organizational changes also contributed to the dropoff in performance.

Output of cement reached a record 139 million metric tons, helping the *construction materials* industry to post an estimated 3-percent gain. But production of other important materials, such as window glass and precast ferroconcrete, which are critical to Gorbachev's modernization plans, declined. Difficulties in adjusting to economic reforms and persistent retooling problems contributed to this sector's woes.

**Ferrous metals** production rose by less than 2 percent, according to our estimate, far short of the rate of increase required to meet the needs of customers—particularly the machine-building sector. Crude steel

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output inched up to 163 million tons—1 million tons more than in 1987. Steel pipe and rolled steel production also rose moderately, despite industrial accidents at the Nizhniy Tagil and Cherepovets metallurgical combines. A number of ferrous metals plants, however, drew heavy fire from ministry officials for lags in introducing continuous casting technology and basic oxygen furnaces.

Growth of *nonferrous metals* production rebounded to 1986 levels, led by gains in aluminum and nickel output. Soviet sources credited increased utilization of processing capacity and new Western smelting equipment for the upturn.

Strong performance in furniture production and a slight improvement in paper output helped sustain an estimated 2.5-percent increase in output of the *wood products industry*. Timber felling was plagued by, among other things, equipment breakdowns. The industry was criticized for shortfalls in the production of chipboard and cardboard packaging.

**Energy.** According to our estimates, energy production increased by a respectable 2.9 percent last year (see table 2).<sup>1</sup> Gas output continued to post hefty gains and moved even with oil as the major sources of primary energy output in the USSR (about 35 percent).

Soviet *oil* production averaged about 12.5 million b/d in 1988, about the same as in the previous year. Daily output during the year, however, fell from a high of 12.53 million b/d in the second quarter to 12.37 million b/d in the fourth quarter. We believe that production in the key West Siberian region—which accounts for two-thirds of national production—has leveled off while production from other regions continues to fall. To prevent further declines in national production, Moscow will need to boost the already staggering amount of investment going to the oil industry.

<sup>1</sup> This measurement differs from the fuels branch production estimates in table 1 (valued in factor cost) because it is calculated in terms of caloric content rather than value of output.

**Table 2**  
USSR: Growth in Energy Production,  
1981-88<sup>a</sup>

	Average Annual 1981-85	1986	1987	1988 <sup>b</sup>
Total primary energy	2.3	4.1	3.2	2.9
Of which:				
Oil (including condensate)	-3.0	3.3	1.5	0
Natural gas	7.6	6.7	6.0	5.9
Coal	-0.8	3.4	1.1	1.6
Nuclear	17.9	-3.2	15.4	15.3
Hydro	3.0	0.8	1.2	2.1
Total electricity	3.6	3.5	4.1	2.4

<sup>a</sup> Data are for coal, crude oil, natural gas, natural gas liquids, and hydroelectric and nuclear power expressed in terms of oil equivalent and include minor fuels such as peat, shale, and fuelwood.

<sup>b</sup> Preliminary.

*Natural gas* output expanded at a brisk 6-percent pace to reach 770 billion cubic meters. Increased production from gasfields in northern West Siberia continues to account for nearly all of the growth in gas output. Maintaining this robust growth over the next several years, however, will become more difficult and expensive, requiring accelerated construction of local distribution pipelines, conversion of existing equipment to gas, and wider use of new gas-fired equipment.

*Raw coal* production increased only slightly more rapidly than in 1987 and reached 772 million metric tons. However, the average energy content of Soviet coal is declining because of the larger share of total production coming from low-quality coal basins in Siberia and deteriorating mining conditions in the Ukraine.

We estimate that *electricity* output grew last year at the slowest pace since 1981. Nearly all of the increase was generated at nuclear and hydro plants rather than fossil-fueled plants as in previous years. The construction of new nuclear and hydro plants is being opposed, however, by environmental activists. In response to popular pressure as well as growing official concern over public safety following the Chernobyl disaster, during 1988 the Soviets announced that construction was suspended or canceled on 12 nuclear plants—involving 34 reactors and about 29,000 megawatts of future capacity. As a result, maintaining electricity growth at the necessary annual rate of 2 to 3 percent will become increasingly difficult in the years ahead.

Despite the rapidly rising costs of energy production in the USSR and the need to boost energy exports, the Soviet economy remains addicted to energy. The availability of vast and heretofore easily exploitable energy resources has firmly embedded the impression of cheap, plentiful energy in the minds of Soviet consumers. Waste remains pervasive, for instance, in both factories and households. We believe energy-associated problems will ultimately become a major barrier to the sustained higher rates of economic growth that Gorbachev wants and badly needs (see inset for a discussion of Moscow's program to deal with its energy problem).

**Light and Food Industries.** Judging from leadership speeches and media criticism, the performance of the branches of industry that produce consumer goods was a source of serious concern to the Soviet leadership last year. The two consumer-oriented industrial branches—light industry and food processing—turned in unimpressive performances.

We estimate that overall output of *light industry* products grew by 2.5 percent. The leadership sharply criticized officials for high prices, the low quality of goods, and production shortfalls. In addition, Soviet officials chastised the industry for ignoring orders for low-priced goods for children and the elderly.

The *food-processing* industry registered less growth than in 1987. Officials and consumers complained that many varieties of food disappeared from production and that in some cases the quality of processed

food—notably bread—declined. Shortages of a number of products were reported in many areas of the country.

**Machinery.** A sharp cutback in data published by Moscow on the manufacture of industrial products is making it more difficult to assess the performance of the machine-building branch of industry. The limited statistics that were published last year as well as leadership statements indicate, however, that these industries did not produce either the quantity or the quality of equipment needed for the regime's modernization program.

We estimate that, despite the heavy investment in the machine-building industries over the past few years, production in 1988 increased by only about 2-1/2 percent—far less than the 7.3-percent annual increase called for in the 1986-90 plan. Output of consumer durables increased by approximately 4 percent; producer durables production grew by about 2 percent. The regime's displeasure over this sector's performance was apparent from the harsh criticism directed at the machine builders throughout the year. Prime Minister Ryzhkov complained openly, for instance, that the machine tool industry made too many manually operated machine tools and too few mechanically controlled ones.

The Kremlin is not, however, backing away from its modernization effort. Rather, several steps were taken during the year to refine and revise the program:

- Last July Moscow announced that only those machinery designs that support 44 designated priority directions of technological development would be centrally funded.
- In December the Politburo reaffirmed machine building's priority role in providing the technological basis for economic modernization and gave the Machine Building Bureau, the ministries, and the State Planning Committee six months to plan "radical measures" to improve the performance of this sector.

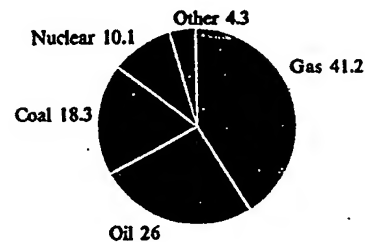
### The Long-Term Energy Program

Moscow's efforts to deal with new challenges in energy policy are reflected in the Long-Term Energy Program, published in 1984, which defined the USSR's energy goals to the year 2000. No aspect of the energy sector was neglected in this policy statement, which appeared to be a compromise among the various advocates of conservation, interfuel substitution, and energy-producing industries.

The program's goals for oil production were stated in vague phrases—such as “securing a stable, high level of oil output” and “an increase in liquid fuel”—that ensured continued priority for resource allocation but are difficult to translate into output targets. Natural gas was touted as the growth fuel until the mid-1990s, when output was scheduled to plateau at an unspecified maximum. Nuclear energy, coal, and hydro (in a reduced role) were slated to meet all growth in energy demand beginning in the late 1990s. Conservation targets, although significant, seemed to imply that most savings would come in the late 1990s rather than grow throughout the period. Fuel substitution was to play a part in the transitions from oil to gas and later from gas to coal.

### USSR: Goals for Energy Supply, Year 2000

Percent



Total: 3.3 billion tons of standard fuel

(46.1 million barrels/day oil equivalent)

The 1989 Plan also emphasizes the importance of continuing the modernization program. It calls for stepping up the rate at which old equipment is retired and for the Ministry of Instrument Making, Automation Equipment, and Control Systems to increase its output—vital to the reequipping of the R&D test base—by 16 percent. The overall production of the crucial components of factory automation—machinery, equipment, and instruments incorporating microprocessors—is to increase by 80 percent, and almost every product newly entered into production will contain microprocessors.

#### Agriculture

Soviet farm production dropped for the second consecutive year in 1988 as record highs in the production of meat, milk, and eggs were more than offset by the smallest potato crop since 1951, an 8-percent drop in

grain output—from 211 million tons in 1987 to 195 million tons in 1988—and almost no growth in vegetable and fruit production (see table 3). Although inventories of hogs held steady, cattle, sheep, and goat herds continued to drop and are now down to 1983 levels. According to some Soviet researchers, herd levels may be so low as to jeopardize Moscow's ambitious longer term plans for meat production. The consumer benefited from the inventory reduction last year; per capita meat availability increased by more than 2 percent. Still, marketing and distribution problems resulted in widespread shortages. The Soviet press reported, for instance, that 80 percent of major cities surveyed suffered “interruptions in supplies of beef.”

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**Table 3**  
**USSR: Growth of Farm Output,**  
**1981-88**

	Average Annual 1981-85	1986	1987	1988 *
	Percent			
Total agricultural output <sup>b</sup>	1.2	10.3	-4.0	-3.1
Farm output <sup>c</sup>	2.1	8.5	-2.5	-2.0
Crops <sup>d</sup>	1.2	9.5	-5.3	-7.5
Livestock <sup>e</sup>	2.7	7.6	0.2	3.0
Million metric tons (except where noted)				
Major crops				
Grain	180.3	210.1	211.4	195.0
Potatoes	78.4	87.2	75.9	62.7
Sugar beets	76.5	79.3	90.4	87.9
Sunflower seeds	5.0	5.3	6.1	6.2
Cotton	8.3	8.2	8.1	8.7
Vegetables	29.2	29.8	29.2	29.3
Major livestock products				
Meat (slaughter weight)	16.2	18.1	18.9	19.3
Milk	94.6	102.2	103.8	106.4
Eggs (billions)	74.4	80.7	82.7	84.6

\* Preliminary.

<sup>b</sup> Net of feed, seed, and waste as well as purchases outside the sector.

<sup>c</sup> Net of feed, seed, and waste.

<sup>d</sup> Net of seed and waste.

<sup>e</sup> Net of feed.

As part of the effort to improve the lot of the consumer, the leadership has been focusing more attention on the agroindustrial sector. Indeed, Gorbachev has put the "food problem" at the head of his list of key domestic issues. He has expressed particular concern that huge amounts of output—about 20 to 30 percent of total production—reportedly continue to spoil or be wasted because of inefficiencies in storing and bringing commodities to market. To rectify this situation, he has lobbied hard for extending the individual and family leasing arrangements now in

**Table 4**  
**USSR: Freight Shipments \***

Million tons

	1980	1985	1986	1987	1988 *
Rail	3,728	3,951	4,076	4,048	4,097
Maritime	228	240	249	251	257
River	568	633	649	673	690
Highway <sup>c</sup>	6,456	6,320	6,653	6,853	6,911
Air	3	3	3	3	3
Oil and gas pipelines	950	1,113	1,168	1,212	1,242

\* Because of multiple counting (shipments on more than one carrier), no totals are shown.

<sup>b</sup> Preliminary.

<sup>c</sup> Excluding the non-common-carrier highway fleet.

limited practice and for weakening the bureaucracy's control of farming. His efforts have been only partially successful, however. While the recent party plenum on agriculture approved the General Secretary's program to allow the leasing of farmland by individuals for periods of up to 50 years, it affirmed that the overwhelming share of agricultural activity will continue to be conducted within state and collective farms.

#### Transportation

Freight shipments inched upward by 1 percent in 1988 (see table 4). The poor record of the transport network in getting goods to market and supplies to enterprises and processing plants contributed to the economy's poor performance. At the same time, all freight carriers were affected to some extent last year by the muted demand for transport services because of the weak growth of industrial output.

The volume of freight shipments carried by the railroads—the backbone of the transportation network—grew by 1.2 percent in 1988 after declining in 1987. Railroad performance, however, deteriorated sharply during the second half of the year because of severe railcar shortages. According to the industry

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newspaper *Gudok*, the shortages resulted from increased delays that occurred in unloading freight at industrial and agricultural facilities as well as from constraints in the operating capacity of the railroads. For years Soviet planners have been niggardly in allocating capital such as new rolling stock and automated equipment to the rail system. Moreover, when capital has been allocated to the rail system by Soviet planners, according to press reports, industry often has failed to meet contract deliveries of, for example, new locomotives and freight cars.

#### **Hard Currency Trade**

The USSR's estimated hard currency trade balance took a turn for the worse in 1988 following a strong showing the previous year. Preliminary data indicate the trade surplus fell by more than \$3 billion as export growth could not keep pace with the growth of imports (see tables 5 and 6).

The dollar value of hard currency exports increased by about 8 percent because of some growth in arms sales to the LDCs and a boost in sales of a variety of nonenergy commodities, such as wood and paper products, metals, and chemicals. At the same time, the value of imports increased by an estimated 25 percent. A poor grain harvest, which fueled a substantial burst in grain purchases on foreign markets, was a major reason for the rise in imports. The larger quantity of grain imports coupled with rising world prices added more than \$3 billion to Moscow's import bill. Machinery and equipment purchases also increased last year, and more consumer goods were bought, although not enough to be noticeable on store shelves.

Moscow apparently has decided to become a more active player in the international trading community and in world financial markets. At a state dinner last year, Gorbachev declared that the Soviet Union has "firmly decided to change its position in the international division of labor and take the path of active economic interaction with the outside world." During the year, the Kremlin continued to emphasize joint ventures as a way of getting access to more Western technology and improving the marketability of its manufactured goods in the West (see inset). In addition, the Soviet press has announced a 15-percent hike

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#### **Recent Trends in Soviet Joint Ventures**

*According to Soviet reporting, as of 31 December 1988, 191 joint ventures had been registered with foreign firms; about 164 of these involve Western participation. The number climbed to well over 300 by the end of the first quarter of this year. (Only 20 joint ventures had been registered by the end of 1987.) Finland, West Germany, Italy, the United States, Austria, and Great Britain were the leading joint-venture partners in terms of the number of agreements actually signed.*

*Despite the impressive growth in the number of deals concluded, the Kremlin is far from satisfied with the progress of its joint-venture program, according to Soviet press reporting. Most of the deals are small: total capital investment in joint ventures amounted to only about \$1.3 billion at the end of 1988 with foreign firms committing \$500 million of that total. Moreover, service and consumer-related projects continue to dominate the list of completed contracts rather than deals that will enable Moscow to acquire advanced technologies. The Soviets have, however, completed several small deals to assemble personal computers and develop software, and some ventures in the machine tool area are also under way. The transfer of human capital—the technical skills, expertise, and know-how of Western labor and management—has also been far less than the Soviet leadership anticipated.*

*Western businessmen are still reluctant to make substantial equity commitments to joint ventures with the Soviets because of uncertain returns, limited management control, high taxation rates, and unreliable material supplies. Recent new joint-venture regulations address some of these concerns, but Moscow has failed to offer solutions to the problem of profit repatriation—the main barrier to foreign involvement*

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**Table 5**  
**USSR: Estimated Hard Currency Balance of Payments**

Billion current US \$

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>a</sup>
Current account balance	4,569	1,470	-381	4,293	4,760	4,664	137	1,373	5,073	1,347
Merchandise trade balance	-4,804	1,814	365	4,468	4,712	4,727	519	2,013	6,164	2,647
Exports, f.o.b.	9,453	27,874	28,254	31,975	32,429	32,173	26,400	25,111	29,092	31,165
Imports, f.o.b.	14,257	26,060	27,889	27,507	27,717	27,446	25,881	23,098	22,928	28,518
Net interest	-521	-1,234	-1,752	-1,275	-1,052	-1,163	-1,482	-1,737	-2,191	-2,400
Other invisibles and transfers	760	890	1,000	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Capital account balance	6,981	284	5,430	2,965	1,541	-124	1,868	1,966	1,017	2,110
Change in gross debt <sup>b</sup>	6,786	-792	1,977	-640	116	224	6,804	6,983	4,768	860
Official debt	1,492	-280	-1,370	967	340	-375	463	563	561	190
Commercial debt	5,294	-512	3,347	-1,607	-224	599	6,340	6,420	4,207	670
Net change in assets held in Western banks <sup>c</sup>	-163	-35	-166	2,122	277	-664	1,787	1,595	-527	20
Estimated exchange rate effect	-22	-411	-1,457	-817	-1,070	-688	3,248	3,322	5,012	-2,570
Net credits to LDCs	715	950	870	2,120	3,200	2,700	1,700	4,100	4,800	5,500
Gold sales	725	1,580	2,700	1,100	750	1,000	1,800	4,000	3,500	4,200
Net errors and omissions <sup>d</sup>	-2,416	-1,754	-5,043	-1,328	-3,219	-4,540	-2,005	-3,342	-4,057	-3,057

<sup>a</sup> Preliminary estimates.

<sup>b</sup> Including additions to short-term debt.

<sup>c</sup> A minus sign signifies a decline in the value of assets.

<sup>d</sup> Includes hard currency assistance to and trade with Communist countries, credits to developed Western countries to finance sales of

oil, other unspecified hard currency expenditures, as well as errors and omissions in other line items of the accounts.

**Table 6**  
**USSR: Estimated Hard Currency Debt to the West**

Billion current US \$

	1975	1980	1981	1982	1983	1984	1985	1986	1987 <sup>a</sup>	1988 <sup>a</sup>
Gross debt	12.5	20.5	22.6	21.9	22.0	22.2	29.0	36.0	40.8	41.7
Commercial debt <sup>b</sup>	8.2	11.0	14.4	12.8	12.6	13.1	19.5	25.9	30.1	30.8
Government and government-backed debt <sup>b</sup>	4.3	9.5	8.2	9.0	9.4	9.1	9.5	10.1	10.6	10.8
Assets in Western banks	3.8	10.0	9.8	11.9	12.2	11.5	13.3	14.9	14.4	14.4
Net debt	8.7	10.5	12.7	10.0	9.8	10.7	15.7	21.1	26.4	27.3

<sup>a</sup> Preliminary estimates.

<sup>b</sup> Estimates of government-backed and commercial debt are measured in current dollars and reflect fluctuations in exchange rates.

Commercial debt also includes estimates of the value of promissory notes held outside banks.

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in imports of consumer goods for 1989. The imports appear to be largely nonfood items from Western countries and may be paid for largely by reductions in other imports rather than by increased borrowing.

Still, the leadership appears, for the most part, to be looking only selectively toward the West to help underwrite *perestroika*. Much of the import growth last year was accounted for by larger grain purchases and Middle Eastern oil that was reexported to both hard and soft currency trading partners. The leadership, moreover, remains sensitive to the implications of becoming financially overextended. A number of officials have warned of the need to avoid dependence on Western financial markets at a time when there is some question about Moscow's ability to pay for goods as well as to effectively absorb and diffuse imported technology.

#### Resource Allocation Policy

The competition for national output in the USSR has intensified in recent years as the growth of the economy has slowed. Nonetheless, the allocation of Soviet GNP among end uses changed little last year. The shares of consumption and investment in overall GNP were roughly the same as the previous year; the share devoted to defense—about 16 percent—was also roughly the same.

#### The Standard of Living Erodes

From his first days in office, Gorbachev has acknowledged publicly the importance of improving living standards. He recognized that a more energetic and committed labor force was necessary to get the economy moving again and that tangible rewards would have to be provided to change worker attitudes. His original game plan strategy for the 1986-90 Five-Year Plan, however, was to appeal to the consumer to tighten his belt for a few more years until the modernization and reform programs yielded some returns. While the regime stuck to this policy through most of its first two years of the five-year plan, leadership speeches during 1987 indicated that the Kremlin had come to realize that Soviet workers wanted more goods and services up front. To build

**Table 7**  
USSR: Percentage Growth in Per Capita Consumption in the 1980s<sup>a</sup>

	Average Annual 1981-85	1986	1987	1988 <sup>b</sup>
Per capita consumption	0.8	-1.5	1.0	1.5
Food	0.4	-7.7	-0.9	0.9 <sup>c</sup>
Soft goods	1.3	2.2	0.3	0
Durables	0.3	10.5	5.4	2.7
Services	1.7	1.6	2.7	3.5

<sup>a</sup> Measured in established prices.

<sup>b</sup> Preliminary estimates.

<sup>c</sup> Includes a 7-percent increase in consumption of alcoholic beverages, which declined sharply in 1986.

support for his program, the regime promised to improve the quality of life—especially food supplies—during 1988.

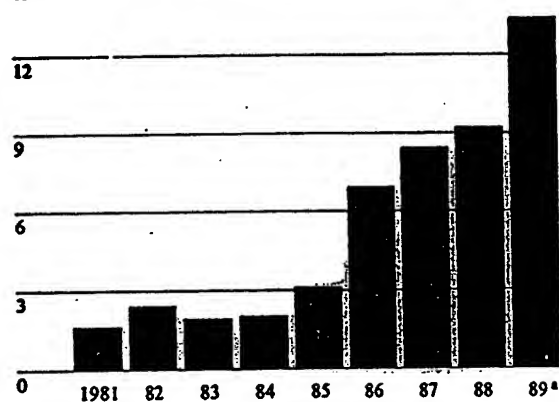
Consumers, however, saw little improvement in their living conditions last year. According to CIA data, per capita consumption grew by only about 1.5 percent (see table 7). Although that rate of increase is somewhat better than in previous years, it was due in large part to the regime's decision to back off from the antialcohol campaign. There would have been no growth if (legal) alcohol consumption had declined in 1988 as it had in 1987. The rate of increase also reflected large percentage gains in the provision of services—and these came from a very low base. The growth of durables fell off markedly and output of soft goods was stagnant. At the same time, disequilibrium in the consumer sector increased sharply: inflationary pressures grew, food shortages intensified, and a variety of soft goods—particularly cheaply priced clothing—disappeared from retail stores.

For the Soviet populace, which has come to believe it is entitled to low-priced goods, the problem of inflation last year was at least as distressing as the



**Figure 2**  
USSR: Estimated State Budget  
Deficit, 1981-89

Percent of GNP

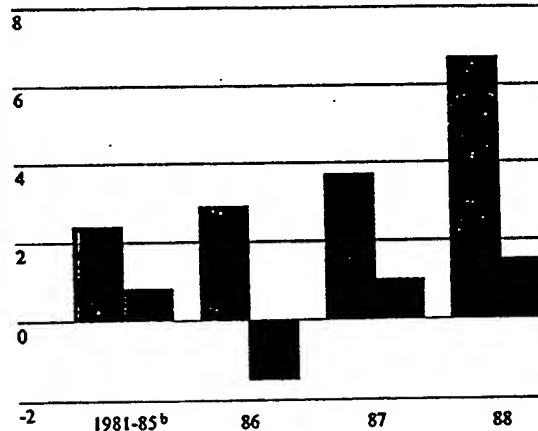


<sup>a</sup> Projected on the basis of the budget announced in October 1988.

**Figure 3**  
USSR: Growth in Average Monthly Wages  
Versus Growth in Real Consumption

Percent

Wages<sup>a</sup>  
Real consumption



<sup>a</sup> Workers and employees.

<sup>b</sup> Average annual growth rate.

shortages of goods.<sup>2</sup> It contributed to a growing perception that under *perestroika* ordinary people are becoming the victims rather than the beneficiaries of change. The gap between poor and more well-off groups in Soviet society, for instance, increased last year. Those on fixed salaries, such as pensioners, experienced real declines in their income while workers in many industries benefited from large increases in their money wages and probably kept up with inflation. The lower income segments of society have been hard hit by inflation. According to the newspaper *Trud*, some 43 million people—about 15 percent

<sup>2</sup> Soviet officials openly acknowledged for the first time last year the existence of inflation. Although official price indexes indicate that prices are generally stable, economists in the USSR admit that the official retail price indexes are unreliable. According to a recent article in *Ekonomicheskaya gazeta*, the estimated annual rate of inflation was 1.6 percent during the period 1981-85, 3.0 percent in 1986, 3.1 percent in 1987, and 4.1 percent in 1988. According to CIA's estimates, retail prices increased by about 5 percent last year—the highest annual rate of increase this decade.

of the population—now have a per capita monthly income at or below the poverty line in the Soviet Union.

The rise in the rate of inflation in the USSR can be traced primarily to the emergence of an enormous budget deficit resulting from a rise in state spending for food subsidies, investment, defense, and the support of unprofitable enterprises and from near stagnation in the growth of government revenues. We estimate that the deficit in 1988 rose to roughly 9 percent of Soviet GNP (see figure 2). Moreover, as part of the wage reform package introduced in 1988, enterprises were given more freedom to determine earnings. This allowed enterprises to raise wages far in excess of productivity increases, creating increased demand for consumer goods that were already in short supply (see figure 3).

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Although consumption levels continue to creep upward, daily life has, in some respects, become even harder in the USSR under Gorbachev than it was under his predecessors. The antialcohol campaign, for instance, has deprived many citizens of the most common means of escape from the harsh realities of Soviet life, and the reform program is undermining those aspects of socialism the populace valued most—job security and low stable prices for basic necessities. The long-suffering Soviet citizen appears to have finally had enough; the populace clearly became more dissatisfied last year with the sluggish pace of improvement in living standards (see inset). The most striking example of popular dissatisfaction came last September during Gorbachev's much publicized trip to Krasnoyarsk, where he was besieged by complaints from local residents over poor housing, food, and schools. A Soviet poll of Leningrad residents in December of last year found that only 5 percent of the people surveyed felt that *perestroika* had brought economic improvement, while 33 percent felt it had brought negative economic change.

**Investment Increases, but Commissionings Lag**  
The Soviet 12th Five-Year Plan laid out an ambitious capital modernization program, calling for the rapid renewal of capital stock in the economy through a combination of high rates of investment and increased rates of retirement for both plant and equipment. According to official Soviet data, the growth of capital investment in 1988 was in line with the higher rates of growth planned for the current five-year planning period:

Average Annual Growth 1981-85	Planned Growth 1986-90	Percent		
		Reported Growth		
		1986	1987	1988
3.5	4.9	8.3	5.7	4.8

At the same time, however, there was almost zero growth in commissionings of new capacity in 1988, and only 68 percent of the state's priority projects scheduled for commissioning were actually completed (see figure 5).

#### **1988: A Disappointing Year for the Consumer**

The Office of Soviet Analysis initiated a new effort last year to track changes in and perceptions of the quality of life in the Soviet Union. The results of the study of conditions in 1988 are shown in figure 4. The figure includes selected indicators of change in consumer welfare—chosen primarily on the basis of the practical or symbolic importance of the specific goods, services, or problems being measured to the average Soviet citizen—and assessments of whether Soviet citizens perceive their living standards to be improving, declining, or remaining the same. The indicators of change in consumer welfare include both officially published Soviet statistics and synthetic measures constructed by CIA on the basis of disaggregated Soviet data. [

According to these indicators of consumer welfare, there was little improvement overall during the year. In many areas, in fact, conditions deteriorated or were perceived by Soviet citizens as having gotten worse. Indeed, the Soviet public—having a better appreciation of its relative standard of living and more freedom under glasnost to vent frustrations—clearly become more critical of the regime over the slow progress that occurred in consumer areas

[ ] cite various reasons for Moscow's inability to bring more new capacity on stream. One was industry's continued penchant, under the existing incentive system, to start new projects rather than bring ongoing ones to completion. The government's decision to step up investment in housing and other consumer-oriented projects also drew construction crews away from existing construction sites to new ones. This accounted in part for the excessively long time required to complete construction projects. In some instances, projects were delayed because needed

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Figure 4  
USSR: Selected Indicators of  
Consumer Welfare

Indicators <sup>a</sup>	Performance measures <sup>b</sup>			Popular perceptions <sup>c</sup> 1988
	1986	1987	1988	
Meat	●	●	●	○
Other foods:				○
Vegetables	●	○	○	
Fruits	●	○	○	
Durable goods	●	●	●	●
Clothing	●	●	●	●
Personal care and repair services	●	●	●	●
Housing	●	●	○	●
Health care	○	●	●	●
Inflation	●	○	○	○

<sup>a</sup> All indicators, except inflation, are measured in per capita terms.

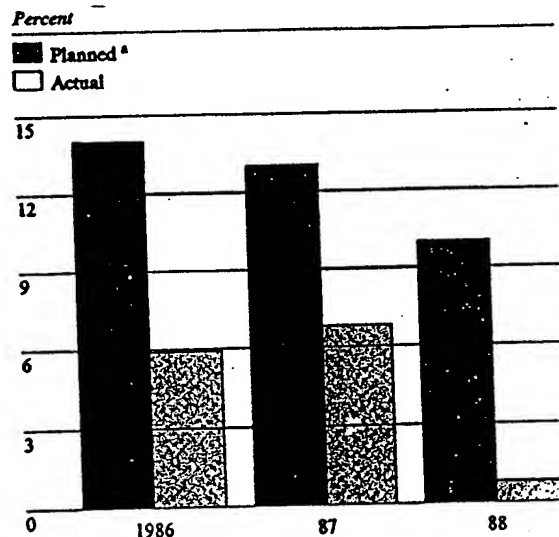
<sup>b</sup> Performance is measured by comparing an indicator's rate of growth with the growth rate achieved during 1981-85, the five-year period that preceded the Gorbachev era.

<sup>c</sup> Based on analysts' judgments of the perception of citizens in the USSR as to how living standards changed under Gorbachev—through December 1988—in comparison with the first half of the 1980s.

machines were not delivered on time. Shortfalls occurred last year, for example, in the production of heavy electrical machines, turbine generators, chemical machinery, metalworking machine tools, and ball bearings. Officials of the USSR's computer industry also were taken to task last year in *Izvestiya* for fulfilling only about 30 percent of the economy's needs for computers and 10 percent of the need for peripheral equipment.

Even when equipment arrived on schedule, it often was not installed promptly. According to Soviet data, the amount of uninstalled equipment increased markedly last year—by 11 percent. The stock of such machinery now amounts to 14 billion rubles, equal to about 20 percent of the value of productive capacity

**Figure 5**  
USSR: Growth in Commissionings  
of New Capital Assets



<sup>a</sup> Estimated for 1988.

brought on line annually in industry the past two years. In addition, confusion accompanying the reorganization of the construction industry and the shift of construction organizations to self-financing also degraded the construction industry's performance.

#### Defense Outlays Continue To Rise

We estimate that defense spending, measured in constant 1982 rubles, grew by roughly 3 percent last year—in line with growth rates of the past few years. Procurement of weapon systems was a major contributor to the growth of defense spending. Expenditures on ship procurement rose sharply, caused primarily because of an increase in spending on both strategic and general purpose submarines. Procurement of missiles—particularly ICBMs and strategic SAMs also displayed strong growth.

Late last year Gorbachev laid the groundwork for future military cuts. In a December speech to the United Nations, the General Secretary promised that major unilateral cuts in military manpower and equipment would be carried out during 1989 and 1990. He expanded on this pledge early this year by specifying that the defense budget and the production of weapons and military equipment would be cut 14.2 percent and 19.5 percent, respectively. Soviet spokesmen have depicted these announcements as part of a broader effort to increase the defense industries' support to the civilian economy by requiring them to produce both more consumer goods and more machinery for civilian industries.

#### Charting a New Course

The original Soviet economic plan for 1989 indicated that the regime was contemplating little change in its strategy for the economy. The only major exception was in the area of consumer welfare, where the plan departed from the original 12th Five-Year Plan goals in setting larger across-the-board increases in production targets. Production of consumer goods, for instance, was slated to rise this year by 7 percent rather than 5.7 percent, the target in the five-year plan. The plan for 1989 also assigned top priority to expanding and improving food supplies in the USSR and called for a much higher growth in consumer services. While it clearly elevated the priority of consumer welfare, however, the original plan laid out last fall did not provide sufficient resources to back up the production of goods and services. Instead, the leadership was relying heavily on large gains in efficiency and resource savings.

Leadership thinking has changed markedly since last fall. The planners have now put more muscle behind the program to raise living standards. As noted above, defense cuts have been promised, and the regime has pledged to shift resources such as personnel and manufacturing capacity from defense to civilian production. At the same time, more investment is being shifted to such consumer-related areas as food processing, light industry, and housing.

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In addition, the Kremlin is urgently trying to get the economy under tighter control. In an effort to restore financial order, for instance, Gorbachev has assigned top priority to reducing the budget deficit. The cuts in defense spending should, if implemented as promised, help reduce the size of the deficit, and the Soviets are also making absolute cuts in state centralized capital investment. Moscow announced in March that state investment expenditures financed from the national budget would be cut by 7.5 billion rubles in 1989. These cuts are to come largely from halting regional development programs and land reclamation projects. From 1990 on, moreover, state expenditures for investment are to be further reduced by giving enterprises more responsibility to finance investment through their own funds and interest-bearing bank loans. (

The regime has also modified its incomes policy. Increases in wages are being monitored more strictly to ensure that they do not exceed gains in worker productivity, although this policy has made little difference so far. According to the State Committee for Statistics, wages in the first three months of 1988 continued to escalate markedly.

Thus, many of the targets set out in the original 1989 Plan (see table 8) are taking second place to the efforts to solve such problems as the budget deficit, wage and price inflation, and consumer goods shortages. For all practical purposes, the plan was out of date when 1989 had barely begun. Indeed, Gorbachev continues to change and shift programs on the go as he struggles to cope with an economy that is floundering badly.

Meanwhile, the regime has had second thoughts about reform policies that might require sacrifices on the part of the consumer (see table 9 for a status report on reform measures). During the past year even the most ardent reformers have questioned the wisdom of reforming retail prices as originally scheduled, and Gorbachev announced early this year that this reform would be postponed. The Kremlin fears that without continued artificial ceilings on retail prices, the accelerating inflation of last year could surge beyond consumer tolerance.

Table 8  
USSR: Key Economic Goals, 1989

Percent

	Increase of 1989 Plan Over 1988 Plan <sup>a</sup>	Increase of 1989 Plan Over 1988 Performance <sup>b</sup>
GNP	4.5	10
Agriculture	2.0	8
Industry	4.0	10
Machinery <sup>c</sup>	6.0	24

<sup>a</sup> Official plan goals based on gross value of output.

<sup>b</sup> Based on CIA estimates of production in 1988.

<sup>c</sup> Civilian and defense machinery.

The regime's vacillation on reform was also reflected in legislation passed in December of last year that prohibited private cooperatives from engaging in a number of activities. Moreover, many cooperatives now must operate under the aegis of state enterprises and institutions, and those operating on the premises of state enterprises or obtaining state-supplied materials can only charge state-set prices for their goods and services. How much damage these various restrictions will cause to the cooperative movement is unclear, but it could be substantial. At a minimum, prospective entrepreneurs are likely to become increasingly discouraged by the climate of hostility that seems to be growing toward cooperatives.

#### Outlook

Soviet plans for the economy this year are focused primarily on getting *perestroika* back on track by reestablishing domestic financial order and improving living standards. In our view, these priorities make good sense. As Gorbachev evidently realizes, he must put his financial house in order and regain the support of consumers if he is to proceed with the other parts of

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**Table 9**  
**Soviet Economic Reforms: A Status Report**

Reform	Major Purpose	1988 Results	1989 Goals
Enterprise self-financing	Enterprises will bear full economic responsibility for the results of their activity. Investment will be financed through an enterprise's own resources.	Enterprises producing 60 percent of output in the economy reportedly operated on self-financing.	Reform is to be extended to 100 percent of industry and agriculture; planners "hope" to complete changeover of nonproduction sphere to same principles.
Regional self-financing	Republics and local governments will have a greater role in forming their own budgets and will be expected to cover a greater share of their expenditures.	Not yet introduced.	Reforms to be introduced in Estonia, Latvia, Lithuania, Belorussia, Moscow City, Tatar ASSR, and Sverdlovsk Oblast.
Planning	Enterprises will produce only a portion of their output in compliance with mandatory state orders and will be given greater latitude in determining the rest.	State orders made up 86 percent of industrial production.	State orders are to make up 40 percent of industrial production.
Supply	Only "scarce" producer goods and supplies for state orders will be distributed through a wholesale system to allow free purchase and sale between suppliers and buyers.	Only 4 percent of industrial output was through wholesale trade.	About 10 percent of total industrial production is to be distributed through wholesale trade, and 50 to 55 percent of sales are to be through state supply networks operated on wholesale trade.
Wages	Entire wage and salary structure in production sector is to be overhauled. Increases will depend on an enterprise's ability to finance them and be tied to increases in productivity.	Contrary to the reform, wages rose by 7 percent while labor productivity rose by only 5 percent.	No announced goal. The goal for 1988 was 60 to 70 percent of work force.
Foreign trade	Allows selected ministries and enterprises to engage directly in foreign trade and enter into joint ventures.	About 25 percent of exports and 44 percent of imports were conducted directly by enterprises.	Beginning 1 April, all enterprises have the right to engage in direct foreign trade subject to some constraints not yet disclosed.
Retail prices	Pricing will be made more flexible and will better reflect supply and demand, probably resulting in higher prices for foods, housing, and consumer services.	Not scheduled to be implemented.	None. To begin only after full public discussion.

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his economic agenda. Moreover, the cuts in investment and defense—if implemented as promised—should help ease the budget deficit and provide resources for increasing production of consumer goods. The lowering of investment targets should also allow the Soviets to tackle the problem of unfinished construction, enabling them to bring additional capacity on line and thus increase output.

Nonetheless, the Soviet economic game plan for 1989 faces some imposing obstacles. In particular, translating cutbacks in investment and defense into increases in consumption will be a difficult task. Although the industrial materials and labor freed up by the cuts should be readily transferable to alternative uses and defense plants should be able to quickly increase their output of such items as refrigerators and televisions from existing production lines, providing additional plant and equipment for the production of consumer

goods will require more time. Moreover, while delaying price reform may reduce consumers' anxieties, it will also deny producers the incentive they need to improve product quality and increase productivity.

On balance, therefore, Soviet economic prospects for 1989 are probably modest at best. Although some reduction in the budget deficit and small improvements in living standards are possible this year, economic growth is likely to remain slow and the regime is likely to achieve no more than a slight advance on the quality or efficiency fronts.

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